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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
YAO, KWANG BIN	

ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/032,010	BYSTED ET AL.	
	Examiner	Art Unit	
	Kwang B. Yao	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 December 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because there are no descriptive legends in Figs. 1, 2, 3, 8, 10, 11. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamalainen et al. (US 5,729,541) in view of Foore et al. (US 6,542,481).

Hamalainen et al. discloses a communication system comprising the following features: 1, a radio transmitting apparatus for mobile communications network base station, the apparatus comprising radio transmitter circuitry and processing means for processing digital signals, wherein the processing means is configured to implement a protocol stack having a physical layer and a medium access control layer (column 6, lines 33-65), above the physical layer (column 5, line 43 to column 7, line 21), and insert a uplink access control signal (Figs. 4 and 8, PACKET ACCESS GRANT; column 7, line 5 to column 8, line 14), for identifying a mobile station which is permitted to transmit, into said signal in a predetermined manner; regarding claim 2, wherein the transmitting apparatus is configured for TDMA (FIGS. 1, 2, 3, TDMA FRAME) operation and said access control signal is included in each burst transmitted thereby; regarding claim 5, a method of transmitting a radio signal from a mobile communications network base station, the method comprising: wherein an uplink access control signal (Figs. 4 and 8, PACKET ACCESS GRANT; column 7, line 5 to column 8, line 14), for identifying a mobile station which is permitted to transmit, into said modulating signal in a predetermined manner before modulating said radio signal; regarding claim 6, wherein the radio signal comprises TDMA (FIGS. 1, 2, 3, TDMA FRAME) bursts and said access control signal is included in each burst. See column 1-9.

Hamalainen et al. does not disclose the following features: regarding claim 1, produce a modulating signal for the radio transmitter circuitry, providing a plurality of transport channels

which are combined to produce said modulating signal; regarding claim 3, wherein said uplink access control signal occupies data bits 150, 151, 168, 169, 171, 172 174, 175, 177, 178 and 195 of each burst and each burst comprises 348 data bits; regarding claim 4, wherein said uplink access control signal is spread over first to fourth consecutive bursts and uses bits 0, 51, 56, 57, 58 and 100 in the first burst, bits 35, 56, 57, 58, 84 and 98 in the second burst, bits 19, 56, 57, 58, 68 and 82 in the third burst and bits 3, 52, 56, 57, 58 and 66 in the fourth burst; regarding claim 5, producing a modulating signal by combining a plurality of transport channels in a medium access control layer of a protocol stack; and transmitting a radio signal modulated by said modulating signal; regarding claim 7, wherein said uplink access control signal occupies data bits 150, 151, 168, 169, 171, 172 174, 175, 177, 178 and 195 of each burst and each burst comprises 348 data bits; regarding claim 8, wherein said uplink access control signal is spread over first to fourth consecutive bursts and uses bits 0, 51, 56, 57, 58 and 100 in the first burst, bits 35, 56, 57, 58, 84 and 98 in the second burst, bits 19, 56, 57, 58, 68 and 82 in the third burst and bits 3, 52, 56, 57, 58 and 66 in the fourth burst.

Regarding claim 1, 5, Foore et al. discloses a communication system comprising the following features: regarding claim 1, regarding claim 1, produce a modulating signal (Fig. 3, Modulation 121) for the radio transmitter circuitry, providing a plurality of transport channels (column 7, line 20 to column 10, line 48) which are combined (Fig. 3, MULTIPLEX SUBLAYER 132) to produce said modulating signal (Fig. 3, Modulation 121); regarding claim 5, producing a modulating signal (Fig. 3, Modulation 121) by combining (Fig. 3, MULTIPLEX SUBLAYER 132) a plurality of transport channels (column 7, line 20 to column 10, line 48) in a medium access control layer of a protocol stack; and transmitting a radio signal modulated by

said modulating signal (Fig. 3, Modulation 121). See column 1-11. It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Hamalainen et al., by using the features, as taught by Foore et al., in order to provide more efficient bandwidth allocation access. See Foore et al., column 2, line 50 to column 3, line 60.

Regarding claims 3, 4, 7, 8, Hamalainen et al. and Foore et al. do not disclose the specific bit locations in a burst. However, it would have been obvious to one of the ordinary skill in the art to implement any bit locations in a burst as a design choice based upon the arrangement specification and requirement for users.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 571-272-3182. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO
PRIMARY EXAMINER

Kwang B. Yao
August 2, 2005